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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,952	09/16/2003	Samar Choudhary	RSW920030153US1 (118)	3845

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CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP
STEVEN M. GREENBERG
950 PENINSULA CORPORATE CIRCLE
SUITE 3020
BOCA RATON, FL 33487

EXAMINER

VERDI, KIMBLEANN C

ART UNIT	PAPER NUMBER
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2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/663,952

Applicant(s)

CHOUDHARY ET AL.

Examiner

Kacy Verdi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on September 16, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>September 16, 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the Application filed on September 16, 2003. Claims 1-18 are pending in the current application.

Specification

1. The disclosure is objected to because of the following informalities:
 - a. paragraph [0020], page 8, line 6 recites "...which may reflect an state change..." which contains an incorrectly spelled phrase, examiner suggests changing line 6 to recite "...which may reflect a state change ..."; and
 - b. paragraph [0018] lines 3 and 5, the recitation of "100B" should be "110B".Appropriate correction is required.

Claim Objections

2. Claims 5, 8-10 and 18 are objected to because of the following informalities:
 - a. claim 5, line 1, the recitation of "...said user interface views..." should be "...said plurality of user interface views...".
 - b. claim 8, line 4, the recitation of "...in disparate..." should be "... in disparate applications..."; and
 - c. claim 18, line 1, the recitation of "The method of claim 17..." should be "The machine readable storage of claim 17,...".
 - d. claims 9 and 10 are rejected for being dependent on an objected base claim 8. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0052980 to Sanghvi et al. (hereinafter Sanghvi) in view of U.S. Patent 5,621,663 to Skagerling.

4. As to claims 1 and 8, Sanghvi teaches the invention substantially as claimed including a user centric policy creation and enforcement method and a machine readable storage, having stored thereon a program module comprising computer readable instructions (hard disk drive 856, magnetic disk drive 858, and optical disk drive 862, Fig. 9), comprising the steps of:

observing state changes (event) and action invocations (e.g. forwarded events) in disparate applications (event sources and event consumers 102 and 108, Fig. 1) (step 202, Fig. 3) through visual views of said applications (UI Applications 152(1)-(3), Fig. 2);

establishing correlations between said observed state changes (event data) and action invocations (step 206, Fig. 3, and step 404, Fig. 5);

formulating rules in a policy (e.g. setting a policy, see paragraph [0033], it is inherent that the policy includes a set of rules) based upon user selected ones of said established correlations (policies 502-508 and merged policy set 510, Fig. 6) each of

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said rules (in policy) specifying a state change (event) in at least one of said applications (step 404, Fig. 5, event filtering), and at least one resulting action invocation (e.g. forwarded event) in at least one other of said applications (forwarding of events, paragraph [0031]).

Although Sanghvi teaches the invention substantially, Sanghvi does not specifically disclose applying said policy to automatically respond to each subsequently observed state change with a specified action invocation.

However Skagerling teaches applying said policy (e.g. Rule Base) to automatically respond to each subsequently observed state change (e.g. event) with a specified action invocation (rule base associates event with action, col. 2, lines 18-21).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the invention of Sanghvi to have included the feature of applying said policy to automatically respond to each subsequently observed state change with a specified action invocation (rulebase associates event with action, col. 2, lines 18-21) as taught by Skagerling because this feature would have provided an adaptive method for changing the rule base and other parameters of Sanghvi in response to reported events generated from monitoring the operation of a computer system (col. 2, lines 13-15 and 32-34 of Skagerling).

5. As to claim 4, Sanghvi teaches the invention substantially as claimed including a user centric policy creation and enforcement system comprising a policy interface unit (WMI Module 106, Central Store Layer, Fig. 2, paragraph [0032]) coupled to a plurality of user interface views into corresponding disparate applications (UI Applications

152(1)-(3), Fig. 2), said policy interface unit (WMI Module 106, Central Store Layer, Fig. 2, paragraph [0032]) having a configuration both for establishing a policy to respond to observed state changes (events) in selected ones of said applications with action invocations (event forwarding) in others of said applications (policy defines event filtering, event correlation, and event forwarding to other devices or applications, paragraph [0031], policy set in Directory Service, paragraph [0033] and [0044]), and also for enforcing said established policy (enforced by event filtering, event correlation, and event forwarding established in policy, paragraph [0031]) .

Although Sanghvi teaches the invention substantially, Sanghvi does not specifically disclose enforcing said established policy by applying said action invocations responsive to observing said state changes.

However Skagerling teaches enforcing said established policy by applying said action invocations responsive to observing said state changes (col. 2, lines 18-21).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the invention of Sanghvi to have included the feature of enforcing said established policy by applying said action invocations responsive to observing said state changes (col. 2, lines 18-21) as taught by Skagerling because this feature would have provided an adaptive method for changing the rule base and other parameters of Sanghvi in response to reported events generated from monitoring the operation of a computer system (col. 2, lines 13-15 and 32-34 of Skagerling).

6. As to claim 6, Sanghvi as modified by Skagerling teaches the system of claim 4, wherein said policy interface unit (WMI Module 106, Central Store Layer, Fig. 2, paragraph [0032]) is disposed within an integrated solutions console (Web-Based Enterprise Management (system), paragraph [0021] of Sanghvi).

7. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0052980 to Sanghvi et al. (hereinafter Sanghvi) in view of U.S. Patent 5,621,663 to Skagerling as applied to claims 1 and 8 above, and further in view of U.S. Patent 6,965,900 B2 to Srinivasa et al. (hereinafter Srinivasa).

8. As to claims 2 and 9, Sanghvi as modified by Skagerling does not teach the method of claim 1 and the machine readable storage of claim 8, wherein said step of observing comprises the steps of:

page crawling markup defining a visual view of said applications; and,
demarcating segments of said markup as segments which visually indicate state changes in said applications.

However Srinivasa teaches the method of claim 1 and the machine readable storage of claim 8, wherein said step of observing comprises the steps of:

page crawling (crawling agents called category agents 120a-120n, 122a-122n, Fig. 3, lines 38-42) markup defining a visual view of said applications (Essential Dimension Markup Language and Event Markup Language, col. 9, lines 35-40); and,

demarcating (e.g. marking) segments of said markup as segments which visually indicate state changes (e.g. event description) in said applications (sequence marked as potential event description, col. 9, lines 42-44).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have further modified the invention of Sanghvi as modified by Skagerling with the teachings of page crawling and demarcating (e.g. marking) from Srinivasa because these features would have provided the Web-based Enterprise Management environment of Sanghvi with a special markup language to identify primary components (used to detect events) between the HTML/XML tags of a document (event extraction 90, Fig. 2, col. 9, lines 35-38) and category agents (web crawler) programmed to search for HTML and XML text (col. 10, lines 32-34).

9. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0052980 to Sanghvi et al. (hereinafter Sanghvi) in view of U.S. Patent 5,621,663 to Skagerling as applied to claims 1 and 8 above, and further in view of U.S. Patent Application Publication 2002/0083168 A1 to Sweeney et. al. (hereinafter Sweeney).

10. As to claim 3 and 10, Sanghvi as modified by Skagerling does not teach the invention substantially as claimed including the method of claim 1 and the machine readable storage of claim 8, wherein said step of establishing comprises the step of:

noting a time for each of said observed state changes;

further noting a time for each of said action invocations; and

correlating (e.g. to determine action) said observed state changes (events) with said action invocations based upon said noted times.

However Sweeney teaches the method of claims 1 and the machine readable storage of claim 8, wherein said step of establishing comprises the steps of:

noting a time for each of said observed state changes (events) (date and timestamp of event recorded in event data, page 6, paragraphs [0165]-[0166]);

further noting a time for each of said action invocations (date and time of the initiation of action (CAD program instructed by Decider module, page 7, paragraph [0180]) is recorded in database, step 870, Fig. 8, page 7, paragraph [0182]); and

correlating (e.g. to determine action) said observed state changes (events) with said action invocations based upon said noted times (AI inference engine consults historical data to determine action, step 850, Fig. 8, page 7, paragraph [0186], e.g. AI inference engine uses time of login event to determine action, page 8, paragraphs [0201]-[0204]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have further modified the invention of Sanghvi as modified by Skagerling with the teachings of noting a time for events and action invocations, and correlating events with action invocations based upon the noted times from Sweeney because these features would have provided a unique identification tag containing a date and time stamp to the event data of Sanghvi which could be used at a later stage for event correlation (page 6, paragraph [0165] and page 8, paragraphs [0201]-[0204] of Sweeney).

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11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0052980 to Sanghvi et al. (hereinafter Sanghvi) in view of U.S. Patent 5,621,663 to Skagerling as applied to claim 4 above, and further in view of "Portal Server Technology" by Christian Wege (hereinafter Wege).

12. As to claim 5, Sanghvi as modified by Skagerling does not teach the system of claim 4, wherein said plurality of user interface views comprise portlet views.

However Wege teaches the system of claim 4, wherein said plurality of user interface views comprise portlet views (Fig. 1, page 74).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have further modified the invention of Sanghvi as modified by Skagerling with the teachings portlet views from Wege because this feature would have provided a mechanism for the user interface views of Sanghvi to utilize portal server technology which provides the user with a single, integrated point of access to information, application, and people when accessing a web application (page 73, lines 1-8 of Wege).

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0052980 to Sanghvi et al. (hereinafter Sanghvi) in view of U.S. Patent 5,621,663 to Skagerling as applied to claim 4 above, and further in view of U.S. Patent Application Publication 2002/0073195 A1 to Hellerstein et al. (hereinafter Hellerstein).

14. As to claim 7, Sanghvi as modified by Skagerling teaches the invention substantially as claimed including the system of claim 4, wherein said policy interface

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unit (WMI Module 106, Central Store Layer, Fig. 2, paragraph [0032]) comprises a user dialog component (Directory Service of Sanghvi) and an enforcement component (Event Processing Machine 15, Fig. 4 of Skagerling), said user dialog component (Directory Service of Sanghvi) having a configuration for accepting a user selection (e.g. Administrator) of said proposed rules (step 404, Fig. 5 and policy set by Administrator in Directory Service, paragraph [0033] and [0044] of Sanghvi), said enforcement component (Event Processing Machine 15, Fig. 4 of Skagerling) having a configuration for enforcing selected ones of said proposed rules (event processor applies rule base to event, col. 5, lines 44-56 of Skagerling).

Although Sanghvi as modified by Skagerling teaches the invention substantially, Sanghvi as modified by Skagerling does not specifically disclose the system of claim 4, wherein said policy interface unit comprises a learning component, said learning component having a configuration for correlating observed events with action invocations to formulate proposed rules.

However Hellerstein teaches the system of claim 4, wherein said policy interface unit (interactive visualization and user interface control, 700, Fig. 6) comprises a learning component (pattern learner, 710, Fig. 6), said learning component (pattern learner, 710, Fig. 6) having a configuration for correlating observed events (e.g. event data) with action invocations (e.g. appropriate action) to formulate proposed rules (learn left-hand side (LHS) of rules based on patterns identified by visualizations (past events), step 410, Fig. 3; augment LHS with a right-hand side (RHS) action to provide a resulting rule, step 420, Fig. 3, paragraph [0049]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have further modified the invention of Sanghvi as modified by Skagerling with the teachings of a learning component from Hellerstein because this feature would have provided a mechanism for users (such as administrators) of Sanghvi to select event groupings that are then translated into left-hand sides (of a rule) by the pattern learner and rule construction in combination with Rule DB access would have provided a mechanism for adding the right-hand side (of the rule) (paragraph [0026] of Hellerstein).

15. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0052980 to Sanghvi et al. (hereinafter Sanghvi) in view of U.S. Patent 6,385,724 B1 to Beckman et al. (hereinafter Beckman).

16. As to claim 11 and 15, Sanghvi teaches the invention substantially as claimed including a method and a machine readable storage, having stored thereon a program module comprising computer readable instructions (hard disk drive 856, magnetic disk drive 858, and optical disk drive 862, Fig. 9), for user centric policy creation and enforcement comprising the steps of:

observing in an initial policy interface unit state changes (event) and action invocations (e.g. forwarded events) (step 202, Fig. 3) in at least one application through a visual view of said at least one application (UI Applications 151(1)-(3), Fig. 2);

establishing correlations between said observed state changes (event data) and action invocations (step 206, Fig. 3, and step 404, Fig. 5);

formulating rules in a policy (e.g. setting a policy, see paragraph [0033], it is inherent that the policy includes a set of rules) based upon user selected ones of said established correlations (policies 502-508 and merged policy set 510, Fig. 6), each of said rules specifying a state change (event) in said at least one application (step 404, Fig. 5, event filtering), and at least one resulting action invocation (e.g. forwarded event) in one of said at least one application (forwarding of events to event consumers, application 104(1), Fig. 1 and paragraph [0031]) and at least one other application (forwarding of events to event consumers, application 104(2), Fig. 1 and paragraph [0031]); and

Although Sanghvi teaches the invention substantially, Sanghvi does not specifically disclose distributing said policy to at least one other policy interface unit.

However Beckman teaches distributing said policy (PS, policy set references 734, Fig. 13) to at least one other policy interface unit (STUB, 762, Fig. 13, when cross-context (client object accesses server object) object reference is used to access interface to the server object, 784, Fig. 13, logic contained in the policies is contributed to the object's policy set is executed automatically and transparently, col. 16, lines 43-46).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have further modified the invention of Sanghvi with the teaching of distributing a policy from Beckman because this feature would have provided a security framework for the WMI module objects of Sanghvi in which a caller chain is built with logic (e.g. policies) outside the objects (col. 3, lines 43-45 of Beckman).

17. As to claims 12 and 16, Sanghvi as modified by Beckman teaches the method of claim 11 and the machine readable storage of claim 15, further comprising the step of enforcing said policy (policies 160, Fig. 2) in said initial policy interface unit (WMI Module 106, Central Store Layer, Fig. 2, paragraph [0032]) to automatically respond to each subsequently observed state change (event data) with a specified action invocation (step 206, Fig. 3 and step 404, Fig. 5 of Sanghvi).

18. As to claims 13 and 17, Sanghvi as modified by Beckman teaches the method of claim 11 and the machine readable storage of claim 15, further comprising the step of enforcing said policy (PS, policy set references 734, Fig. 13 of Beckman) in said at least one other policy interface unit (STUB, 762, Fig. 13, when cross-context (client object accesses server object) object reference is used to access interface to the server object, 784, Fig. 13, logic contained in the policies is contributed to the object's policy set is executed automatically and transparently, col. 16, lines 43-46 of Beckman) automatically respond to each subsequently observed state change (e.g. receive event of Beckman and event data of Sanghvi) with a specified action invocation (e.g. logic particular to event of Beckman) (upon receiving event the policy executes logic particular to event, col. 17, lines 2-3 of Beckman and step 206, Fig. 3 and step 404, Fig. 5 of Sanghvi).

19. As to claims 14 and 18, Sanghvi as modified by Beckman teaches the method of claim 13 and the machine readable storage of claim 17, further comprising the step of limiting said enforcing of said policy (e.g. call not be forwarded to server object, 784, Fig. 13 of Beckman) in said at least one other policy interface unit (client object proxy,

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732, Fig. 13) based upon pre-defined permissions (e.g. security policy) (termination of call by client object to server object by security policy, could indicate client object does not have access privileges, col. 17, lines 17-23 and policy provides result indicating the call not be forwarded to server object enforcing a security boundary, col. 17, lines 25-27 of Beckman).

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,787,409 to Seiffert et al. discloses a dynamic monitoring system for monitoring a computer system.

U.S. Patent 6,226,693 B1 to Chow et al. discloses a method and system for efficiently handling events occurring in an environment in a data processing system.

U.S. Patent 6,347,374 B1 to Drake et. al. discloses a system for event detection.

U.S. Patent 6,766,368 B1 to Jakobson et al. discloses a method and system for efficiently correlating events within a data processing system and then transmitting messages to various network entities in response to an occurrence of a particular network event.

U.S. Patent Application Publication 2002/0165842 A1 to Hellerstein et al. discloses a technique for systematically constructing one or more correlation rules for use by an event management system for managing a network with one or more computing devices.

U.S. Patent Application Publication 2003/0074440 A1 to Grabarnik et al. discloses techniques for data-driven validation, completion and construction of event relationship networks (ERNs).

"A Design Framework for Internet-Scale Event Observation and Notification" by D.S. Rosenblum and A.L. Wolf discloses a framework for event observation and notification that serves the needs of Internet-Scale applications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kacy Verdi whose telephone number is (571) 270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571) 272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KV
3/26/2007


XIAO WU
SUPERVISORY PATENT EXAMINER